000035485

CORRES. CONTROL
OUTGOING LTR NO.

DOE ORDER # 4700.1
94 RF 07388

EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

DIST.	ltr	ENC
AMARAL, M.E.		
BURLINGAME, A.H.		
BUSBY, W.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
DAVIS, J.G.		
FERRERA, D.W.		
FRAY, R.E.		
GEIS, J.A.		
GLOVER, W.S.		
GOLAN, P.M.		
HANNI, B.J.		
HARMAN, L.K.		
HEALY, T.J.		
HEDAHL, T.		
HILBIG, J.G.		
HUTCHINS, N. M.		
JACKSON, D.T.		
KELL, R.E.		
KUESTER, A.W.		
MARX, G.E.		
McDONALD, M.M.		
MCKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R.V.		
POTTER, G.L.		
PIZUTTO, G.L.		
RISING, T.L.		
SANDLIN, N.B.		
SCHWARTZ, J.K.		
SETLOCK, G.H.		
STEWART, D.L.		
STIGER, S.G.		
TOBIN, P.M.		
VOORHEIS, G.M.		
WILSON, J.M.		
Peterman, B. D.	X	
CORRES CONTROL	X	X
ADMIN RECORD/080	X	X
TRAFFIC		
PATS/T130G		
CLASSIFICATION:		
UCNI		
UNCLASSIFIED		
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE

DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

DATE

IN REPLY TO RFP CC NO:
N/A

ACTION ITEM STATUS

☐ OPEN ☐ CLOSED
☐ PARTIAL

LTR APPROVALS:

ORIG & TYPIST INITIALS
MPM alk

RF-46469 (Rev. 07/94)

July 13, 1994 94-RF-07388

R. Sarter
Project Manager
Environmental Restoration
DOE/RFFO

RECOMMENDATIONS FOR SUPPLEMENTAL SAMPLING IN OPERABLE UNIT 13 - MFM-018-94

Action: Concurrence required.

On June 24, 1994, a meeting was held with Colorado Department of Health project manager Jeff Swanson to discuss the comments on the Draft Technical Memorandum No. 1 - Addendum to the Field Sampling Plan for Operable Unit (OU) 13 and to locate surficial soil sampling points in several Individual Hazardous Substance Sites. A copy of the meeting minutes prepared by Jacobs Engineering Group is attached. Mr. Swanson requested that the surficial soils samples in Individual Hazardous Substance Sites 117.1 and 197 be analyzed for contaminants found in waste crates generated during the construction of Resource Conservation & Recovery Act Storage Unit No. 1 in the southern part of Individual Hazardous Substance Site 197. The contaminants identified in the waste crates were benzene, toluene, ethylbenzene, and xylene commonly referred to as BTEX compounds. These compounds are found in the Target Compound List of Volatile Organic Compounds (TCL-VOCs).

I recommend that we perform this analysis, as requested, based on the results of the waste crate sampling. The analysis will cost approximately $300 per sample. No more than 20 samples will be analyzed; 14 samples plus Quality Assurance/Quality Control samples as required, at an approximate cost of $6,000. The cost of the samples is negligible when compared with the overall Stage I Laboratory Analysis costs and can be covered within the current OU 13 budget for this fiscal year without impacting existing work plan activities. By including these analysis, in this round of sampling, we will get a jump on analysis that will be required in Stage II sampling and gain more information about the nature and extent of contamination in Individual Hazardous Substance Sites 117.1 and 197. If you agree, the map of the sampling locations will be faxed to Jeff Swanson.

In addition, I was informed that EG&G Rocky Flats, Inc. Waste Management is interpreting the historic release of diesel fuel during fire fighting training activities in Individual Hazardous Substance Site 134 (N) as a spill and subject to immediate cleanup as outlined in Jim Hartman's letter dated January 21, 1993 (attached). Although a final determination has not been made on this cleanup, I feel it is prudent to have my sampling crews take an additional surficial grab sample and have it rush analyzed for TCL-VOAs and TAL metals (including lithium and magnesium) which are contaminants of concern in this Individual Hazardous Substance Site. This is necessary for adequate waste characterization should the soils be removed and containerized. The cost of this sampling will be approximately $2500.

ADMIN RECORD

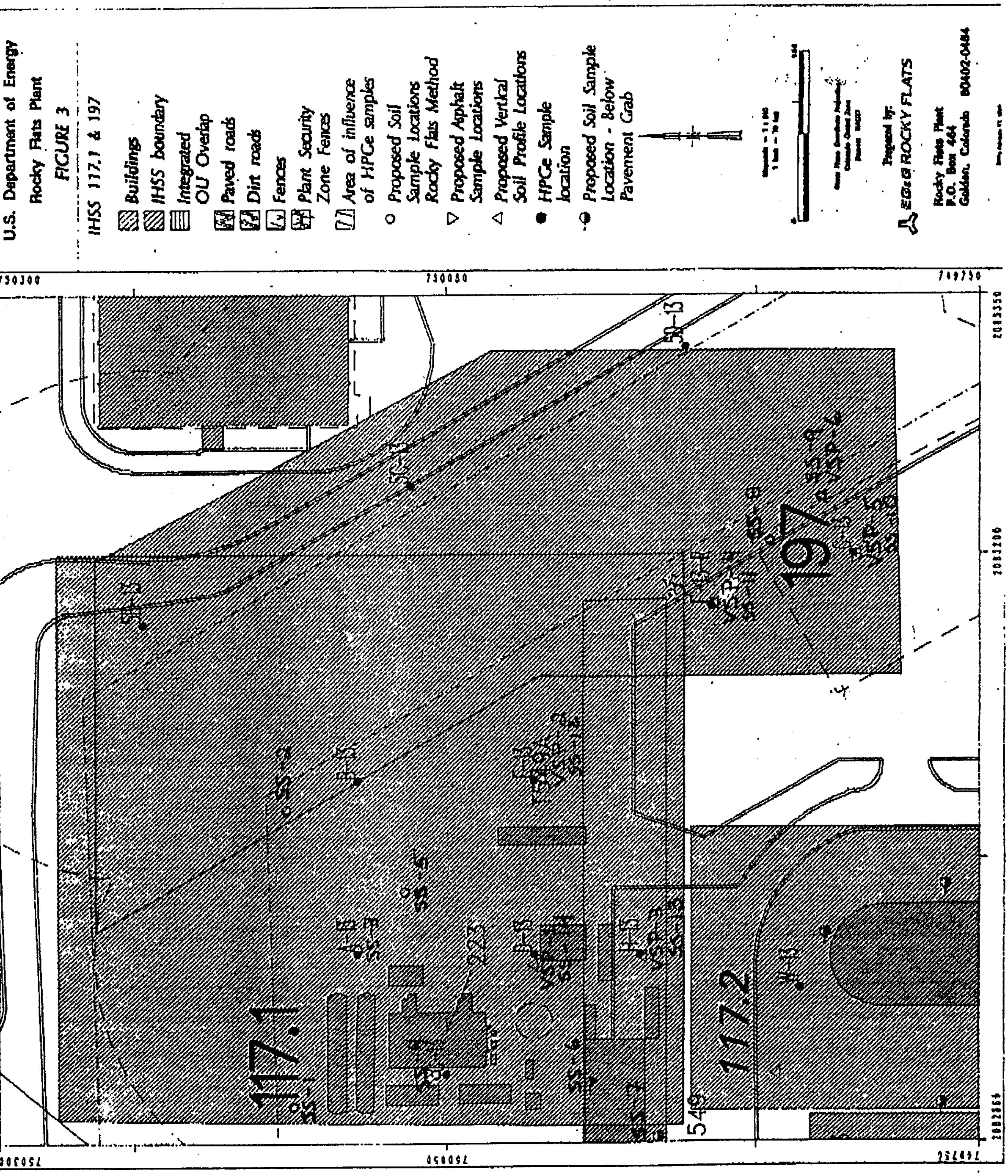
If you have any concerns about this course of action, please give a call. I can be reached on extension 8624.

M. F. McHugh
Project Manager-OU 13
Industrial Area OU Closures/D & D Team
EG&G Rocky Flats, Inc.

Orig. and 1 cc - R. Sarter
" " " - F. R. Lockhart

MFM:alk

Attachments:
As Stated (3)


U.S. Department of Energy
Rocky Flats Plant
FIGURE 3
IHSS 117.1 & 197
Buildings
IHSS boundary
Integrated OU Overlap
Paved roads
Dirt roads
Fences
Plant Security Zone Fences
Area of influence of HPGe samples
Proposed Soil Sample Locations Rocky Flats Method
Proposed Asphalt Sample Locations
Proposed Vertical Soil Profile Locations
HPGe Sample location
Proposed Soil Sample Location - Below Pavement Grab
Prepared by:
EG&G ROCKY FLATS
Rocky Flats Plant
P.O. Box 464
Golden, Colorado 80402-0464
117.1
117.2
197

CORRES. CONTROL
INCOMING LTR NO.

0335 RF 93

DUE DATE

ACTION DIST.	LTR	ENC
BENEDETTI, R.L.	X	
BENJAMIN, A.		
BERMAN, H.S.		
CARNIVAL, G.J.		
CORDOVA, R.C.		
CROUCHER, D.W.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HEALY, T.J.		
HEDAHL, T.G.	X	
HILBIG, J.G.		
KEKER, E.H.		
KIRBY, W.A.		
KUESTER, A.W.		
LEE, E.M.		
MANN, H.P.		
MARX, G.E.		
McKENNA, F.G.		
MORGAN, R.V.	X	
PIZZUTO, V.M.		
POTTER, G.L.		
RILEY, J.H.		
SANDLIN, N.B.		
SATTERWHITE, D.G.		
SCHUBERT, A.L.	X	
SETLOCK, G.H.	X	
SHEPLER, R.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.		
WILSON, J.M.		
ZANE, J.O.		
Ungar M	X	
Greengard T	X	
Taylor K		
Lemon Ed	X	

CORRES. CONTROL	X	X
TRAFFIC		

Reviewed for Addressee
Corres. Control RFP

1-21-93
DATE BY

United States Government Department of Energy

memorandum

Rocky Flats Office

RECEIVED U.S.D.O.E. R.F.O. - MAIL ROOM JAN 21 3 12 PM '93
1993 JAN 21 A 11:01

EG&G ROCKY FLATS PLANT CORRESPONDENCE CONTROL

RECEIVED JAN 22 1993

JAN 21 1993

WMED:DG:00542

Spills: Releases in Operable Units

T. G. Hedahl, Associate General Manager, Environmental and Waste Management, EG&G
R. L. Benedetti, Associate General Manager, Environmental Restoration Management, EG&G

It has come to my attention that current spills and releases in operable units (OU's) are not being promptly remediated. You are directed to discontinue this practice, and clean up and report current spills immediately, in accordance with the Rocky Flats directives and procedures, such as the Emergency Plan and the Resource Conservation and Recovery Act Contingency Plan.

Presumably this practice was initiated because the cleanup of current spills would be accomplished when the older historical releases in OU's are remediated under the Interagency Agreement (IAG). However, because of the extended delay for cleanups under the IAG and the potential harm to persons or the environment, current spills in OU's (and elsewhere) must be remediated promptly.

If you have any further questions, please contact Tom Lukow at extension 4561 or Dave Grosek at extension 3305.

James K. Hartman
Assistant Manager
for Environmental Management

cc:
T. E. Lukow, WMED, RFO

JACOBS ENGINEERING GROUP INC.

PROJECT NOTE NO. Integrated Operable Units

PROJECT NO. 05H60213

CONFIRMATION OF:	CONFERENCE x	DATE HELD	June 24, 1994 at 1:00 p.m.
	TELECOM	DATE ISSUED	June 27, 1994
	OTHER	RECORDED BY	Patrick McGinnis
		PLACE	RFP site T119A

SUBJECT

CDH Comments to OU 13 Technical Memorandum

PARTICIPANTS: (* DENOTES PART-TIME ATTENDANCE)

Michael McHugh (EG&G) x8624
Regina Sarter (DOE IAOU Mgr.) x7252
Jim Burd (DOE/AEI support) x8252
Terry McLeod (DOE/IAOU support) x4767
*David Hyder (EG&G Rad. Eng.) x6282
Jeff Swanson (CDH) 692-3416
Theresa Jehn-Dellaport (JEG) 595-8855
Patrick McGinnis (JEG) 595-8855

ACTION REQ'D. BY	ITEM
	The following text highlights a discussion held by the parties listed above concerning the comments provided by the Colorado Department of Health for the OU 13 Technical Memorandum No. 1.
R.S.	Are we excepting EPA to provide comments regarding TM No. 1 and if so are they substantially different from the concerns raised by CDH ?
J.S.	CDH has not received comments from EPA as of today. However, a copy of the CDH comments have been provided to EPA and we have discussed them with EPA. EPA concurs with the CDH comments and does not have any other comments that are substantially different.
M.M.	The first CDH comments to be discussed are those related to HPGe surveys. In particular, the comment to Section 3.1 IHSS 117.1 and 197, Evaluation of Initial FIDLER Survey Results. We have performed additional sodium iodide (NaI, i.e. FIDLER) and HPGe studies around IHSS 197. The survey between the Protected Area fences has not yet been performed. (The

ACTION REQ'D. BY	ITEM
	additional survey results are presented to everyone).
D.H.	Background locations at RFP are not representative of a "clean" site where a background FIDLER survey can be performed. FIDLERs are sourced at a 17 KeV energy range for Am-241. When radiological engineering performs a review of a FIDLER survey (17- point) they look for changes over an area, not how each point compares to background. A background location is geographically dependent. Many natural and anthropogenic sources influence radiological surveys. Natural sources can include geological deposits of uranium and cosmic sources entering the earth's atmosphere. Anthropogenic sources include atmospheric fall out from above ground nuclear testing that occurred in Nevada. Also, the model that the HPGe surveys are based on does not account for highly concentrated point sources of radiation. Such a source can influence the results of the HPGe survey and is termed "shine". The Radiological Engineering department does not believe the results of the HPGe survey or the additional FIDLER surveys constitute a radiological health concern. Radiological engineerings recommendation for Personnel Protective Equipment (PPE) at this site would be nitrile gloves and DOE coveralls.
M.M.	HPGe detectors are cylindrical shaped and will detect sources in a horizontal plane as well as a vertical plane. The HPGe detector is actually recording a flux distributed over an area and not a discrete sampling point value. Also, HPGe surveys are intended to be used as a screening tool only. We believe the intent of the comment was directed to health concerns for workers collecting samples.
J.S.	Yes, this was the intent of the comment. In addition, IHSS 197 is located near RCRA Storage Unit No. 1. The results of any radiological surveys conducted at IHSSs should also be reported to other workers in the immediate area who may be affected but who may not be part of IOU operations.
M.M.	Radiological Engineering is notified of any unusual survey results. They are then responsible for notifying any and all workers in the area of any hazards and the appropriate PPE.

ACTION REQ'D. BY	ITEM
J.S.	CDH believes in the interim from initial HPGe results to confirmatory NaI results, personnel in the immediate area of unusual HPGe results should be notified.
M.M.	Again, all unusual survey results, HPGe or FIDLER, are reported to Radiological Engineering and they are responsible for making any health based judgements regarding worker safety. The results of the additional HPGe and NaI surveys will be included in the next iteration of the Technical Memorandum. Additional or relocation of sampling points at IHSS 197 are not required based on the survey results. However, EG&G/DOE will entertain any ideas CDH presents. The original sampling locations listed in the OU 13 Work Plan for IHSS 148 and field checked in fall 1993 by CDH, JEG, and EG&G will be sampled.
T.J.D.	The general comment regarding Deletion of surficial soil sampling from field sampling Plan for IHSS 148 indicates that additional asphalt samples need to be collected. Wright Water Engineers has provided JEG with historical information comparing the chronology of the surface spills with paving activities. The surface spills occurred in 1961 and the paving occurred in 1970. This indicates the asphalt would not contain evidence of surface spills at IHSS 148. As a result, we do not understand the purpose of collecting asphalt samples at IHSS 148.
J.S.	The intent of the comment was not directed at collecting asphalt samples only surficial soil samples beneath the existing asphalt.
T.J.D.	The comment pertaining to Section 3.5 IHSS 148 Radiological Survey Coverage at IHSS 148 indicates an additional HPGe survey point should be located east of building 123. HPGe survey point 3A-13 is located directly east of the building however, an additional HPGe survey point (8I-9) was located west of the building. Did the comment intend to add a point west of building 123 instead of east?
J.S.	The map provided to CDH did not clearly illustrate the HPGe survey point located east of building 123 (3A-13).

PROJECT NOTE NO. PROJECT NO.

ACTION REQ'D. BY	ITEM
M.M.	Updated HPGe survey location maps will be included in the next iteration of the Technical Memorandum.
D.H.	The comment to Section 3.8 IHSS 190 Elevated Uranium-238 value at location TT-13 is related to the discussion regarding the HPGe instrument. Conexes located south of IHSS 190 contain low level radiological waste which would produce "shine" when an HPGe survey is conducted in the immediate area. A 17-point FIDLER survey was conducted by JEG personnel at TT-13 and in the immediate vicinity. In addition, the FIDLER was "swung" through the area to identify any elevated radiological locations. The FIDLER results indicate an exponential decline away from the tents storing the low level waste. Ordinarily, you see sporadic fluctuations with FIDLER measurements when a contaminated area is encountered. The FIDLER detector was rotated 90 degrees and pointed directly at the low level storage area. Comparing the FIDLER measurements indicated a five fold increase when the instrument was pointed at the low level storage tents.
J.S.	Is U-235 in the detection range of the FIDLER?
D.H.	Yes.
M.M.	HPGe surveys are used as a screening level approach to determine if elevated levels of radiological activity exist for sampling and health and safety purposes. If HPGe results indicate elevated levels of radiological activity, then the next step is to confirm the HPGe survey with a FIDLER (NaI) survey.
J.S.	The HPGe model does not account for a point source within the instruments radius of detection and biasing the results. The HPGe instrument may not be a valuable tool.
J.B.	Doesn't the exponential decrease away from the storage tents indicate that it is the source of the elevated HPGe measurements and not the area north of the storage tents?
J.S.	What about the 1,300 net count FIDLER measurement? It does not reflect an exponential decrease.
D.H.	The "elevated" 1,300 net count FIDLER measurement does not

ACTION REQ'D. BY	ITEM
	pose a concern to me. This area would not come close to being considered an RCA. A 500 microrem / hr measurement is considered an RCA. Dave Spruce (JEG) has been very efficient in notifying Radiological Engineering if elevated levels are encountered.
J.S.	We need to be able to present defensible evidence of what levels of radiological activity were detected, what instrument was used and that the overall results indicate the levels are low and do not present a health concern.
M.M.	We have field log books that illustrate the results of "swinging" the FIDLER meter.
J.S.	For health and safety concerns the result of the FIDLER survey need to be documented and presented. HPGe is a new technology and is still not completely understood by all parties involved. As a result the comfort level associated with the HPGe results is not high across the plant site. However, the HPGe survey results are sufficient for OU 13.
D.H.	Net radiological activity counts in the hundreds are not considered high. The areas north and west inside Tent 1 (IHSS 117.2) are posted RCAs. The HPGe results in the area of Tent 1 are not influenced by the posted RCAs inside Tent 1.
J.S.	A vertical soil profile (VSP) should be located at a high HPGe measurement to verify the HPGe result.
M.M.	Sampling locations at IHSS 117.2 will be moved as follows: • move SS-4 to Q-13 • move VSP-2 at SS-11 to Q-13 with SS-4 • SS-11 remains at the current location without an associated VSP. Stressed vegetation is an invalid comment due to the mislocation of the swale identified on the map. DOE will sample in the swale area although the vegetation is not currently stressed.

PROJECT NOTE NO. PROJECT NO.

ACTION REQ'D. BY	ITEM
T.J.D.	The next topic of discussion is IHSS 117.3, the tanks at Central Avenue. The leaking glove box incident at this location occurred prior to the construction of the existing berm surrounding the tanks. As a result, we do not want to sample the berm materials. We suggest moving sample point SS-6 to a location north of the berm and south of the Central Avenue ditch.
M.M.	In reference to the Section 1.3 Phase 1, Stage 1 Activities comment, we also want to perform a sediment sampling program this summer (1994). This effort would not be comprehensive and would be within the context of the this Technical Memorandum.
J.S.	CDH will agree to this conceptually. The intent of the comment was to ensure that surface water and sediment sampling is not forgotten. The results of such a study are important to the overall program.
M.M.	What needs to be done to implement a surface water and sediment sampling program is to modify the subcontract and limit the number of surface water samples to 25 to 30. This work is not out of scope.
J.S.	Was the berm surrounding the tanks constructed of fill material brought in from another area or was it constructed of material in the are of IHSS 117.3?
T.J.D.	We believe the fill was clean and brought in from another area. We will confirm this through the HRR.
M.M.	The sampling point to be moved north of the tanks (SS-6) should not be located in the residual ditch material located on the south side of the ditch.
M.M.	Regarding IHSS 117.1, can we proceed with sampling activities in the absence of a FIDLER survey between the PA fences?
J.S.	We do not want to slow down field sampling activities however, if additional information can be obtained between the fences that is beneficial, try to conduct the survey. Did we receive the results of the analysis from the materials stored in the crates at IHSS 197.

PROJECT NOTE NO. PROJECT NO.

ACTION REQ'D. BY	ITEM
M.M.	Yes, the results indicate elevated levels in the ppm range of toluene and xylene.
J.S.	Can the results be used to help locate sampling points in IHSS 197?
M.M.	This is a new issue and will have to be further reviewed. Soil gas sampling may be a tool to investigate this issue further. Also, we may want to add semi-volatile (SVOA) analyses to all 11 samples at IHSS 117.1. I will follow up on funding for SVOA analysis. We will submit maps of IHSS 117.1, as part of our responses, with new sampling locations to CDH for approval.
T.J.D.	The next comment to be addressed is regarding 100 percent coverage of HPGe.
J.S.	The intent of this comment was a reminder to move the crates and connexes at IHSS 197 and resurvey the area with the HPGe instrument.
M.M.	The crates and connexes have been moved and the area will be surveyed. This is an ongoing activity.
J.S.	What is the date of the current "spirit" document?
M.M.	We will provide CDH with a list of document versions.
T.J.D.	Has the issue of locating asphalt samples in conjunction with HPGe surveys been sufficiently addressed?
J.S.	The only anomaly may be in IHSS 197. Make sure the soil samples collected below the asphalt are not elevated and locate some asphalt samples in IHSS 197 as well.
T.J.D.	The next comment is the general comment regarding statistics.
J.S.	The intent of the comment was to document that the guidance will be used for comparison of sampling results to background.
T.J.D.	The next comment is regarding Section 1.1 Purpose Analytical Methods for Asphalt and Concrete.

PROJECT NOTE NO. PROJECT NO.

ACTION REQ'D. BY	ITEM
J.S.	The intent of the comment was to make sure that the digestion method in SW 846 is being used for this modified 200.7 procedure.
T.J.D.	We have discussed this issue to Paul Gomez (EG&G CLP chemist). Paul has reviewed the CLP contract and the digestion method referenced in the contract for modified 200.7 is identical to SW 846.
J.S.	Resubmittal of the Technical Memorandum will be easier to review if it can be produced as a redline version.
T.J.D.	A redline version can be produced and the TM will be submitted as such.
J.S.	The final TM does not need to be resubmitted without the redlines.
M.M.	The final version of the TM may need to be submitted without the redlines so that it can be issued as a control document. I will review the procedures for issuing a control document.
T.J.D.	The comment to Section 3.2 IHSS 117.2, 158 and 169 in particular IHSS 169.
J.S.	If IHSS 169 is not being investigated then simply state this so people are not confused when they review the TM.
T.J.D.	In response to the comment for Section 3.5 IHSS 148 OPWL Historical Information Review at IHSS 148 we will be working in conjunction with the efforts being conducted at OU 9.
M.M.	We will not duplicated work between OU 9 and OU 13 regarding the OPWL. If there are any problems the OU 9 and OU 13 teams will work together and share information. We are trying to bring the budget for borehole sampling at OU 13 into this fiscal years (1994) funding so this work can be performed this year.
J.S.	CDH wants to ensure that the HRR will be investigated so that the OPWL can be properly located and investigated.

PROJECT NOTE NO. PROJECT NO.

ACTION REQ'D. BY	ITEM
M.M.	Coordination between IHSSs and OUs will be conducted.
T.J.D.	We need to discuss the surface water and sediment sampling issue again.
M.M.	This needs to be treated as a preliminary technical discussion only. Conceptually we will evenly space sediment samples throughout the industrial area and down Central Avenue to the end of the ditch. The total number of samples will be 25 to 30 at this time. If there is water in the ditch, then grab samples will be collected as the opportunity presents itself.
J.B.	Were the analytes for sediment sampling listed in the OU 13 Work Plan?
M.M.	No, the Work Plan was a general discussion and stated that an integrated sampling plan would be developed.
J.S.	CDH agrees conceptually to the sediment and surface water sampling plan as presented here today.
M.M.	We will develop a sample location map and submit it to DOE for approval and then to CDH for review. The development of this sediment and surface water sampling program is in response to CDHs comment to Section 1.3 Phase 1, Stage 1 Activities.
J.B.	Should the sampling points be biased to take advantage of physical features such as confluences with other ditches instead of equally spaced?
J.S.	The sampling plan should state the samples will be equally spaced and biased where field inspection indicates the need for unequally spaced locations.
M.M.	It will be the responsibility of DOE to determine if the limited surface water and sediment sampling program will be administered and funded under OU 13. If not it will be implemented under OU 12.
R.S.	Administratively, justification will be required for shifting this work from OU 12 to OU 13.
J.S.	I would like to request a map illustrating the OU 10 and OU 13

PROJECT NOTE NO. PROJECT NO.

ACTION REQ'D. BY	ITEM
	IHSS locations. Sampling activities can proceed at IHSSs 117.2, 117.3, and 148.
M.M.	We will provide you with a copy of the OU 10 and OU 13 maps.
	The meeting adjourned at 3:40 p.m.